KUNDENDIENST

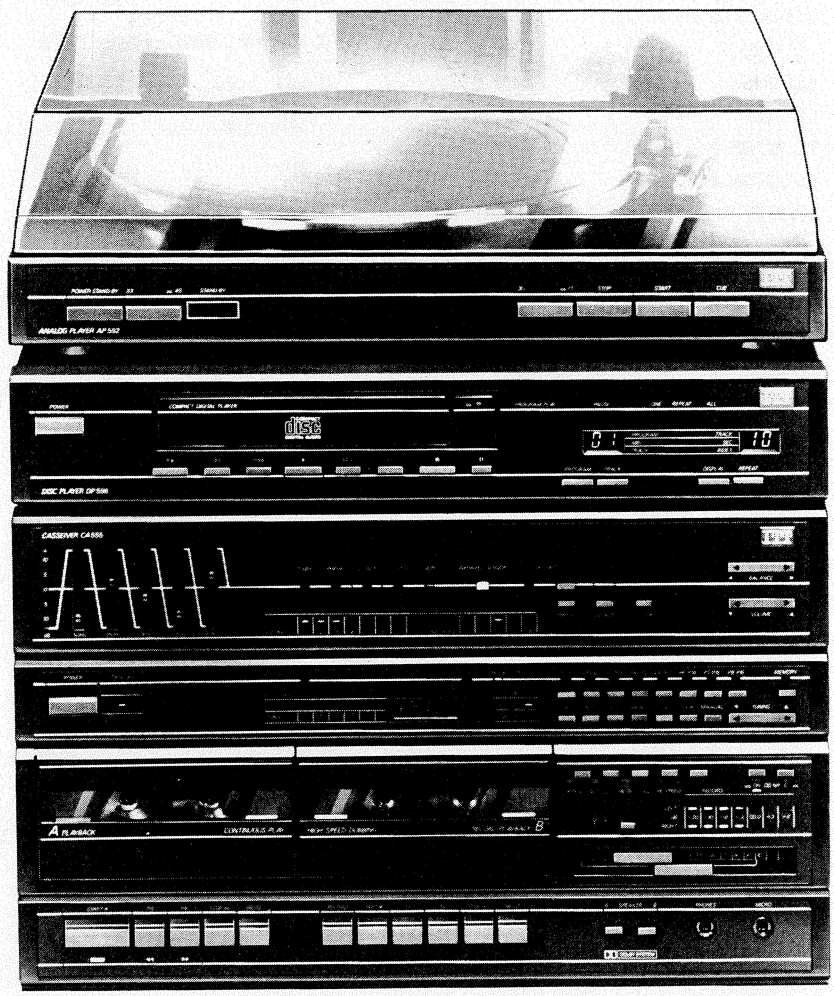
ITT Graetz

SERVICE

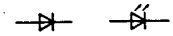
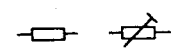
MANUAL

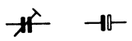
CA 555
CA 655
AP 591
DP 591

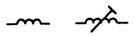
R
159
1987

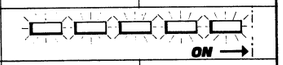
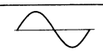


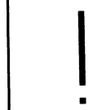
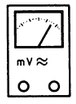
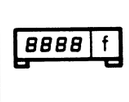
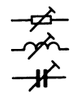
Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.
IC 1	M5F 78 M 12 L	3771 53 19
IC 2	M5F 78 M 06 L	3771 53 20
IC 101	STK 41822	3771 53 18
IC 102	TC 9152 P	3763 22 91
IC 103	TC 9177 P	3771 53 36
IC 104, 204	M 5227 P	3771 47 91
IC 301	LA 3245	3771 53 14
IC 302	SN 74 LS 05 N	3771 53 33
IC 303	HA 12088 ANT	3771 53 15
IC 304	BA 3707	3771 50 38
IC 305	M 74 LS 05 P	3771 48 03
IC 311, 411	LB 1408	3771 53 35
IC 501	LA 1266	3763 23 37
IC 502	LA 3401	3763 23 33
IC 601	TC 91185 P	3771 53 30
IC 602	CX 20106 A	3771 53 31
IC 603	TC 9150 P	3771 53 32
IC 604	LB 1423 N	3763 23 15
IC 605	TD 6301 AP	3763 23 16
IC 606	TD 6104 P	3763 14 68
IC 607	TC 9147 BP	3763 23 17
IC 608	BA 618	3763 10 81
Q 1	SC 1815 GR	3612 41 20
Q 2,100,200,506, 507,509...511, 514, 516, 520...522, 605...608, 610...615, 617, 618	JC 501 R	3614 49 29
Q 3, 310, 321...325,329 515,517...519	JA 101 R	3614 49 30
Q 316...318, 330...335, 342, 620	2 SC 3400	3642 49 86
Q 319, 326	2 SC 2120 GY-T	3614 55 17
C 320	2 SC 2240 GR-T	3614 55 16
Q 327, 328	2 SB 632 KF	3614 43 08
Q 347, 447	2 SC 536 F-AUD	3614 43 09
Q 501, 504	2 SK 161 Y	3614 43 05
Q 502	2 SC 2999 E	3614 49 86
Q 503, 508	2 SK 544 E	3614 43 04
Q 505	2 SC 930 E	3614 49 43
Q 512, 513	2 SC 536 G	3614 37 32
Q 524	2 SC 2839 E	3614 43 06
Q 601...604	2 SD 1012 G	3614 52 06
Q 609, 619	2 SA 1346	3614 43 07
X 501...503	Ceramic Filter	4551 91 35
X 504	Ceramic Filter	4552 94 93
X 505	Ceramic Filter	4551 92 40
X 601	Quarz 7,200 MHz	4421 24 05

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.
		
D 1...4, 17...20	DS 135 D-KB 1	3656 28 31
D 5,15,16	GZA 5,6 Z	3656 27 68
D 6,11,12, 324...328,346	DSF 10 C	3656 29 96
D 7...10	S 3 V 20	3657 13 47
D 13,21,22,305, 306,675...680, 682...697	GMA 01	3656 27 70
D 14	DBA 10 C	3656 30 33
D 35,614...618	SLP 155 B	3681 15 98
D 300...304, 307...318, 347, 348	1SS 133	3656 22 30
D 319	GZA 6,8 Y	3653 01 99
D 320	GZA 5,1 Y	3656 27 72
D 321	GZA 7,5 Z	3656 28 37
D 329...337, 652...657, 660...672	SLP 162 B (LED)	3681 17 10
D 338...345, 658, 673	SLP 262 B (LED)	3681 17 11
D 501...504	SVC 211	3174 91 60
D 505, 506	KV 1236	3174 91 61
D 507...514, 621...647, 674,681,698, 699	DS 442	3651 15 89
D 601...608,613	SLP 155 B 50	3681 17 09
D 619	TPS 703 A	3683 10 81
D 648	TZA 2,2X	3656 30 01
D 651	SL 1436-03 (LED)	3681 17 04
D 659	SLP 980 F-50	3681 17 05
		
R 2	27 Ohm 1 W	3151 82 65
R 9	2,2 Ohm 1 W	3151 82 66
R 14,15,580	100 Ohm 1 W	3151 82 33
R 17	120 Ohm 0,25 W	3151 82 67
R 18, 19	100 Ohm 0,5 W	3151 81 08
R 20, 21	1 kOhm 1 W	3151 82 68
R 107,110,111, 207,210,211	4,7 Ohm 0,5 W	3131 07 72
R 127, 227	390 Ohm 1 W	3151 82 30
R 370	68 kOhm 1 W	3141 39 12
R 490	56 Ohm 2 W	3151 82 69
R 527	150 Ohm 1 W	3151 82 59
R 564	120 Ohm 1 W	3151 81 61
R 601	12 Ohm 1 W	3156 09 62
VR 101...105	2 x 100 kOhm	3118 90 77
VR 301,302,401, 402, 501	47 kOhm	3111 86 51

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.
VR 303,403,405, 406,503,504	22 kOhm	3111 86 52
VR 304,404,502	100 kOhm	3111 86 58
VR 305, 306	10 kOhm	3111 86 59
VR 505	470 kOhm	3111 87 94
		
C 6	470 uF 25 V	3422 43 16
C 7,52,53,124, 224,310,322, 328,330,341, 371,375,377, 386,388,410, 422,428,430, 441,488,533, 540,554,559, 576,611,612	10 uF 16 V miniatur	3422 85 30
C 12, 13	3000 uF 50 V	3422 99 17
C 14,15,103,203	47 uF 63 V	3422 64 12
C 16...18	10 uF 50 V	3422 86 19
C 19	0,1 uF	3422 99 16
C 20, 39	100 uF 50 V miniatur	3422 86 35
C 25, 26	330 uF 16 V	3422 99 12
C 27,28,304,404	47 uF 10 V miniatur	3422 85 31
C 33	1000 uF 35 V miniatur	3422 86 32
C 34,37,142, 242,309,311, 313,326,366, 378,384,389, 409,411,413, 426,489,542, 551,580,581, 603	1 uF 50 V miniatur	3422 86 94
C 35,38,359,376, 385,525,544, 606	47 uF 16 V miniatur	3422 85 42
C 36	1000 uF 16 V	3422 85 66
C 40,101,102, 316,321,416, 421	2,2 uF 50 V miniatur	3422 85 09
C 41	22 uF 10 V miniatur	3422 85 45
C 42,374,615	33 uF 10 V miniatur	3422 85 37
C 102, 202	100 uF 10 V miniatur	3422 85 38
C 119,123,128, 131,132,134, 219,223,228, 231,232,234, 558,585,586, 604	3,3 uF 25 V miniatur	3422 85 41
C 143,243,545, 568	0,1 uF 50 V miniatur	3422 85 55
C 144,244,307, 351,352,324, 407,424,557	4,7 uF 25 V miniatur	3422 85 32
C 140,240,381, 629,546,572, 578	0,22 uF 50 V	3422 08 65

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.
C 315,320, 415,420	0,68 uF 50 V	3422 87 18
C 308,380, 408,628	0,33 uF 50 V	3422 87 07
C 119,220,601	100 uF 6,3 V miniatur	3422 85 26
C 325,382, 425,619	0,47 uF 50 V miniatur	3422 85 56
C 354,358,372, 373,390	22 uF 16 V miniatur	3422 85 46
C 353,355,360, 387,550,557	100 uF 16 V	3422 28 29
C 356,357	470 uF 16 V miniatur	3421 08 86
C 369,370, 383,579	3,3 uF 50 V miniatur	3422 85 48
C 573	2,2 uF 50 V miniatur	3422 85 09
C 607,630	47 uF 6,3 V miniatur	3422 85 59
C 620	0,047 uF 5,5 V	3422 87 72
C 621	330 uF 10 V	3422 24 63
C 640, 641	470 uF 6,3 V miniatur	3422 87 10
		
L 1, 2	40 uH	4543 16 85
L 300, 400	Filter	4552 92 24
L 301, 401		4543 21 39
L 302, 402		4543 21 40
L 303...305, 403,404	10 mH	4543 21 41
L 306,307, 406,407	3,9 uH	4543 21 38
L 310	Oszillator	4543 20 14
L 501		4543 21 34
L 502		4543 21 35
L 503	Filter	4552 94 59
L 504	Filter	4552 94 97
L 505	Filter	4552 71 21
L 506	filter	4552 71 20
L 507	Filter	4552 71 23
L 508	Filter	4552 94 98
L 509	Filter	4552 71 22
L 510	Ant. MW	4543 20 90
L 511	Ant. LW	4543 20 89
L 512		4543 21 36
L 513		4543 21 37
L 514		4552 71 24
L 515, 516		4552 94 99
T 501	Filter FM	4552 94 54
T 502	Filter	4552 71 25
T 503	Filter	4552 71 26
T 504	Filter	4552 94 56

				DISPLAY			!
AM	460 kHz IC 501 PIN 21 VIA 20 nF		SPEAKER JK 104	522 kHz	T 504	maximum	
MW			TP 2, ⊥	1611 kHz	L 513	9 V	
LW			TP 2, ⊥	360 kHz	L 512	8,5 V	
MW	ANT. 75 Ω 603 kHz		"	603 kHz	L 510	maximum	
LW	ANT. 75 Ω 153 kHz		"	153 kHz	L 511	maximum	
MW	ANT. 75 Ω 999 kHz 5 mV (74 dB µV)			999 kHz	SVR 503		
	" 0,2 mV (45 dB µV)		IC 501 PIN 8	999 kHz	SVR 501	8,5 V ↘ OV	
FM ZF	10,7 MHz IN T 501	SPEAKER JK 104			T 501 T 502 T 503	maximum Sym.	
	ANT. 75 Ω 90 MHz 2 µV (65 dB µV)		SPEAKER JK 104	90 MHz	L 504 L 505 L 506	maximum	
	ANT. 75 Ω 106 MHz 2 µV (65 dB µV)		"	106 MHz	CT 1 CT 2 CT 3	maximum	
STEREO	ANT. 75 Ω 98 MHz 1 mV (60 dB µV) 6 kHz mod. L STEREO R L STEREO R	SPEAKERS R L JK 104		98 MHz	SVR 505	minimum	
	ANT. 75 Ω 98 MHz 1 mV (60 dB µV)		TP 3, TP 4	98 MHz	T 502	0 ± 10 mV	
	ANT. 75 Ω 98 MHz 3 µV (10 dB µV)			98 MHz	SVR 502	MUTE OFF	
	" 1 mV (60 dB µV)			98 MHz	SVR 504	± 30 kHz MUTE ON	

							
TAPE A TAPE B	START ▶		TP 305		10 kHz		maximum
TAPE A HIGH SPEED	START ▶ TP 304			TP 305	3150 Hz	SVR 305	5340 Hz
TAPE A NORMAL SPEED	START ▶			TP 305	"	SVR 405	3150 Hz
TAPE B HIGH SPEED	START ▶ TP 304			TP 305	"	SVR 306	5340 Hz
TAPE B NORMAL SPEED	START ▶			TP 305	"	SVR 406	3150 Hz
TAPE A	START ▶		TP 301		400 Hz 0 dB	SVR 301 SVR 401	300 mV
TAPE B	START ▶		TP 301		400 Hz 0 dB	SVR 302 SVR 402	300 mV
Erase Oscillator	TAPE B RECORD			CP 9	NORMAL (FE)	L 310	105 kHz ± 1 kHz
BIAS	"		TP 303		"	SVR 304 SVR 404	4,5 mV
RECORD – PLAYBACK LEVEL	"	1 kHz 400 mV IN AUX	TP 302		"	VR 301	300 mV
(REPEAT)	RECORD START ▶	1 kHz 400 mV	TP 301			RECORD ◀⟷▶ START ▶ SVR 303 SVR 403	300 mV

MAIN

Q509,510,511,514 JC501
Q506,507 JC501
Q502 2SCI923or2SC2999
Q503 2SK544
Q504,501 2SKI61
Q505 2SC2839or2SC930
Q524 2SC2839

Q512,513 2SC536or2SCI740
Q518 2SK544

D501~504 SVC211SP
D505,506 KV1236Z
D507,508 ISS1588 or DS442

D509~513 ISI588or DS442

Q517~519 JA101
Q520~522 JC501
Q516 JC501
Q515 JA101

D21,22 GMA01
DI1,12,17~20 DSI35
DI3 DS442
DI5,16 GZA5.6
D7,8,9,10 S3V20
DI4 DBAI0
IC1 M5F78MI2L
IC2 M5F78M06L

IC501 LA1266
IC502 LA3401
IC102 TC9152P
IC101 STK 4182II

Q100,200 JC501
Q3 JA101

IC	PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IC501	AM	1.1	1.1	1.1	0	10.4	10.4	10.4	8.8	3.9	2.5	2.2	3.1	0	1.4	1.5	0	0	1.1	1.4	9.7	3.7	3.6	3.6	2.2
	FM	2.5	2.5	2.5	0	10.7	10.7	10.8	10.1	3.4	2.4	2.7	3.2	0	1.5	1.5	0	0	2.5	1.5	0	4.0	4.0	4.0	3.1
IC502	AM	3.2	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.2	9.7	0	0	2.0	0	0	2.9	9.1	5.2	2.9	7.5	1.8	11.0		
	FM	3.3	3.2	3.3	3.2	3.1	3.2	3.2	3.1	3.8	0	3.9	0	2.0	4.9	6.1	2.8	2.9	2.8	2.9	2.9	3.5	10.7		

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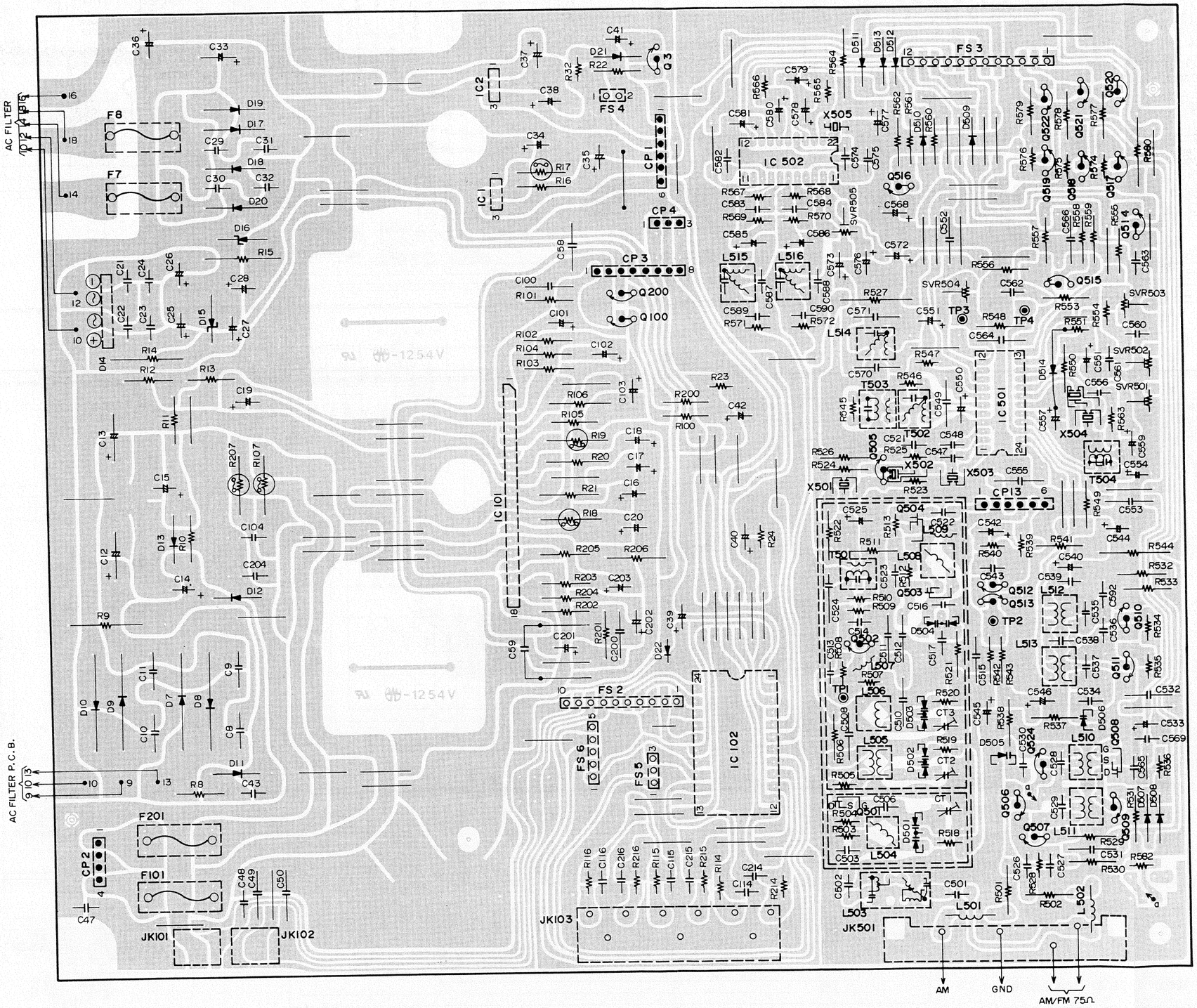
MAIN P.C.B. BOTTOM



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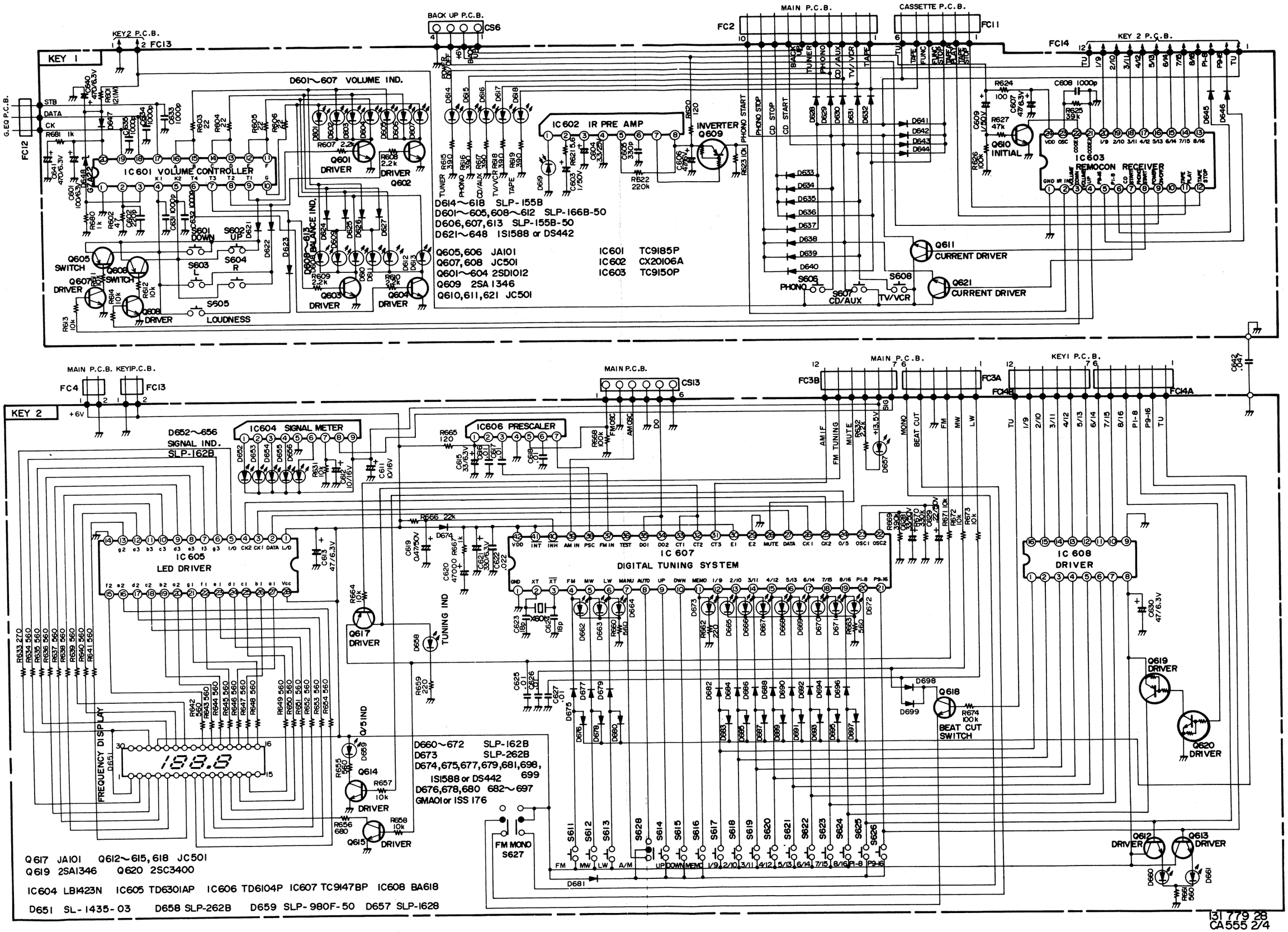
CA555 1/4


KEY 1
KEY2 P.C.B.
FC13
BACK UP P.C.B.
CS6
MAIN P.C.B.
FC2
CASSETTE P.C.B.
FC11
KEY 2 P.C.B.
FC14
G.EQ P.C.B.
FC12
STB
DATA
CK
IC601 VOLUME CONTROLLER
D601~607 VOLUME IND.
IC602 IR PRE AMP
INVERTER Q609
IC603 REMOCON RECEIVER
Q601 DRIVER
Q602 DRIVER
Q603 DRIVER
Q604 DRIVER
Q605 SWITCH
Q606 SWITCH
Q607 DRIVER
Q608 DRIVER
S601 DOWN
S602 UP
S603 L
S604 R
S605 LOUDNESS
D608~613 BALANCE IND.
Q610 INITIAL
Q611 CURRENT DRIVER
Q621 CURRENT DRIVER
S606 PHONO
S607 CD/AUX
S608 TV/VCR
D614~618 SLP-155B
D601~605,608~612 SLP-166B-50
D606,607,613 SLP-155B-50
D621~648 1SI588 or DS442
Q605,606 JA101
Q607,608 JC501
Q601~604 2SD1012
Q609 2SA1346
Q610,611,621 JC501
IC601 TC9185P
IC602 CX20106A
IC603 TC9150P
MAIN P.C.B. KEYIP.C.B.
FC4
FC13
MAIN P.C.B.
CS13
KEY I P.C.B.
FC3B
FC3A
FC14B
FC14A
KEY 2
IC604 SIGNAL METER
D652~656 SIGNAL IND. SLP-162B
IC606 PRESCALER
IC605 LED DRIVER
IC607 DIGITAL TUNING SYSTEM
IC608 DRIVER
Q617 DRIVER
TUNING IND
Q5 IND
FREQUENCY DISPLAY
D651
189.8
Q614 DRIVER
Q615 DRIVER
Q619 DRIVER
Q620 DRIVER
Q612 DRIVER
Q613 DRIVER
Q618 BEAT CUT SWITCH
FM MONO S627
D660~672 SLP-162B
D673 SLP-262B
D674,675,677,679,681,698,699 1SI588 or DS442
D676,678,680 682~697 GMA01 or ISS 176
Q617 JA101 Q612~615,618 JC501
Q619 2SA1346 Q620 2SC3400
IC604 LB1423N IC605 TD6301AP IC606 TD6104P IC607 TC9147BP IC608 BA618
D651 SL-1435-03 D658 SLP-262B D659 SLP-980F-50 D657 SLP-1628
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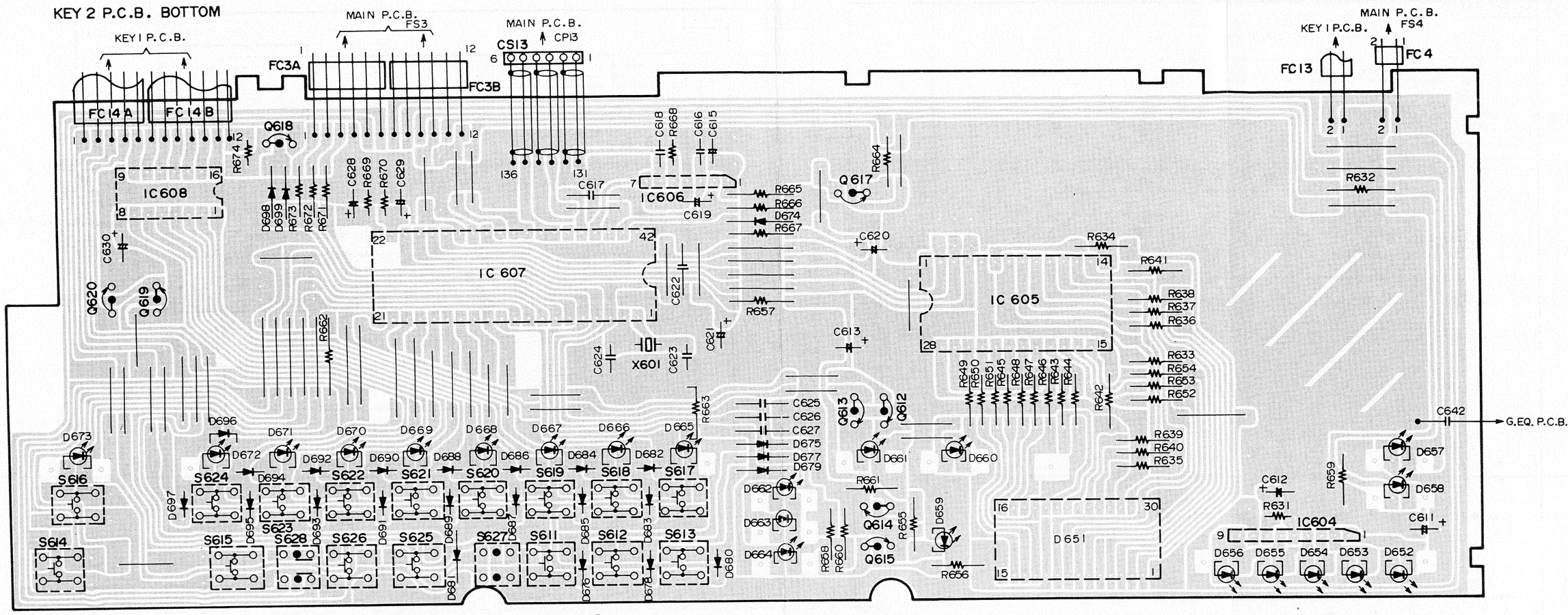
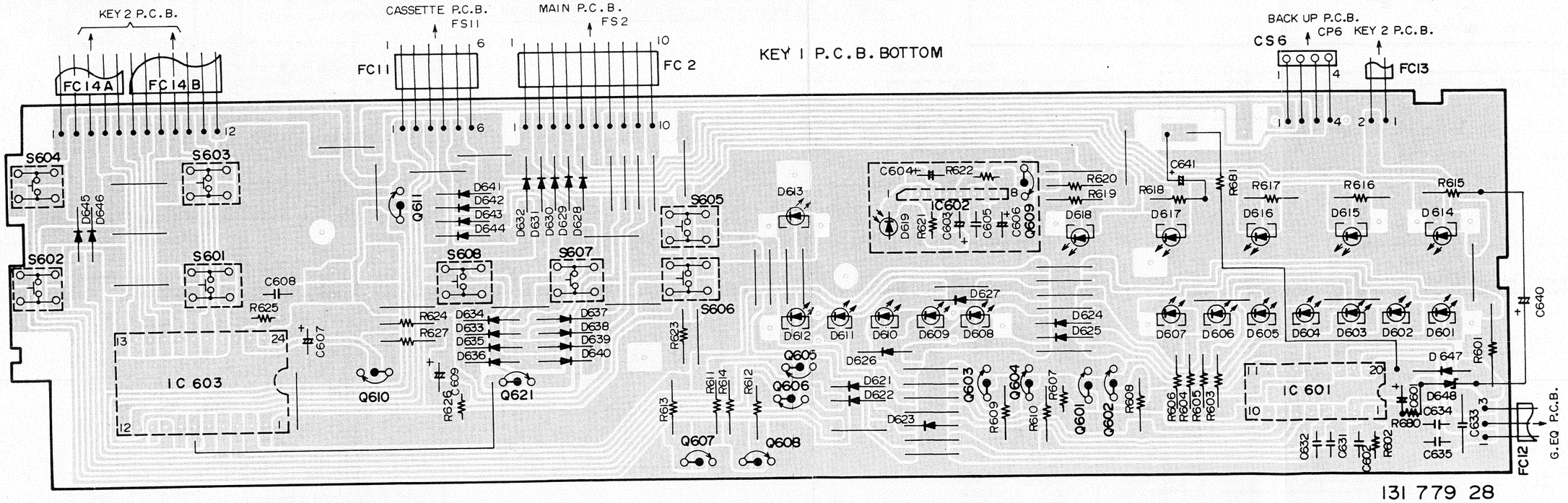
CA555 2/4

KEY 2 P.C.B. BOTTOM



KEY I P.C.B. BOTTOM



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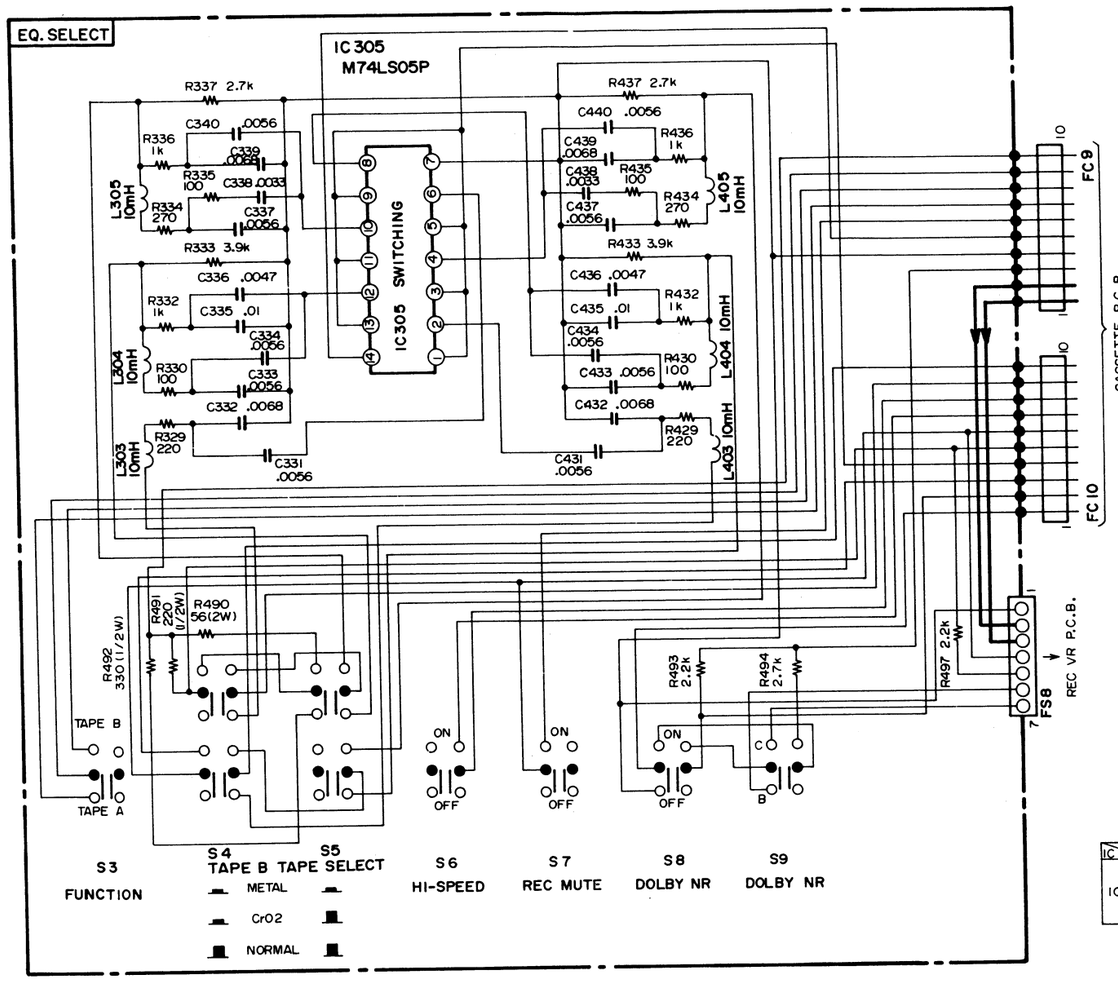
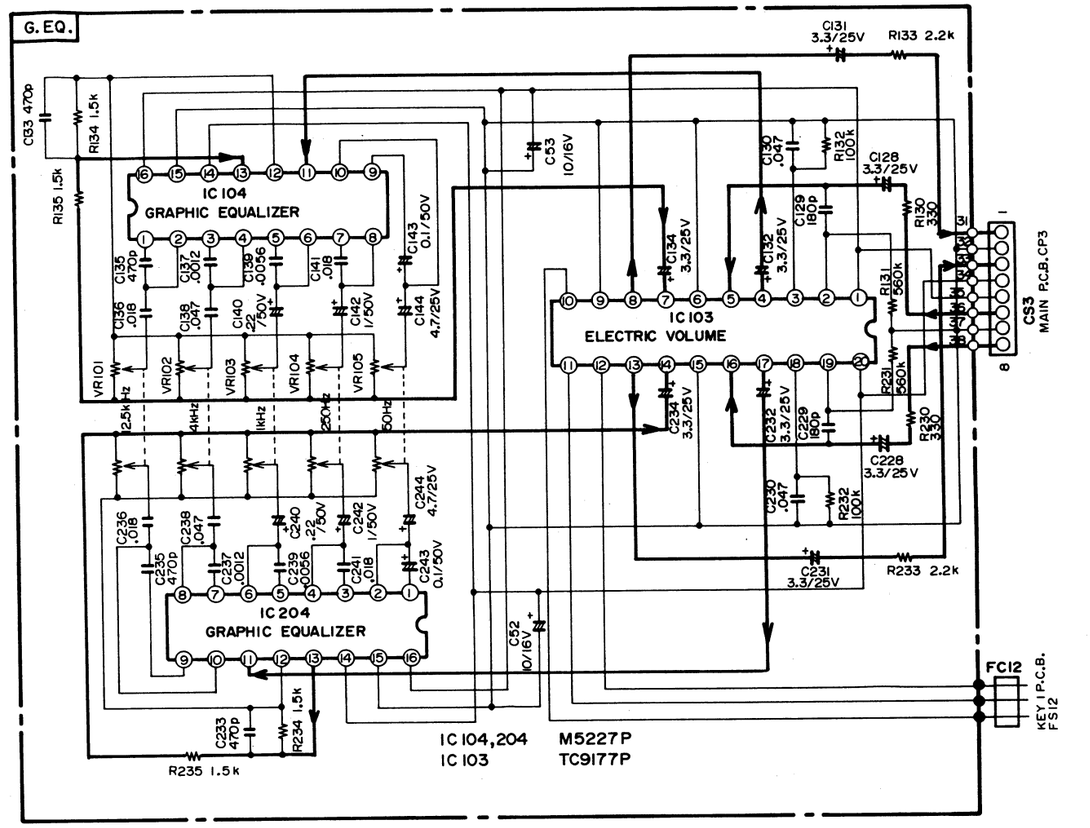
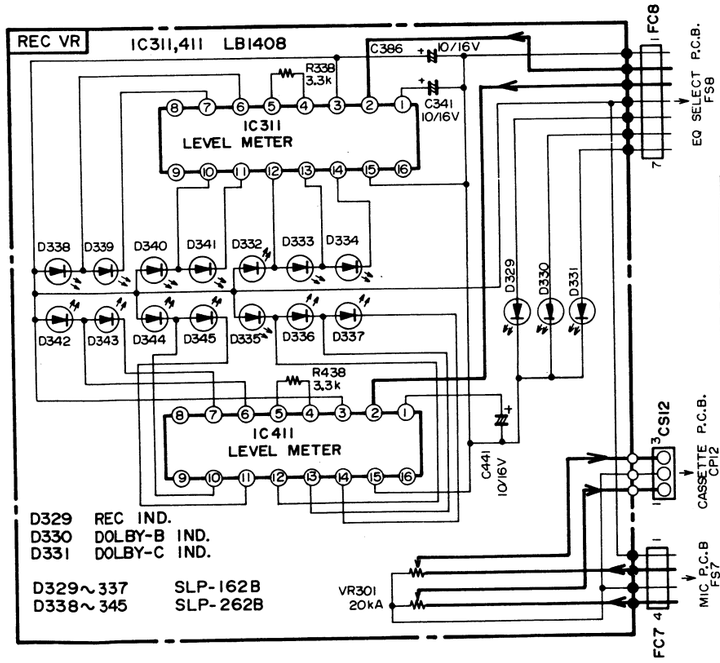
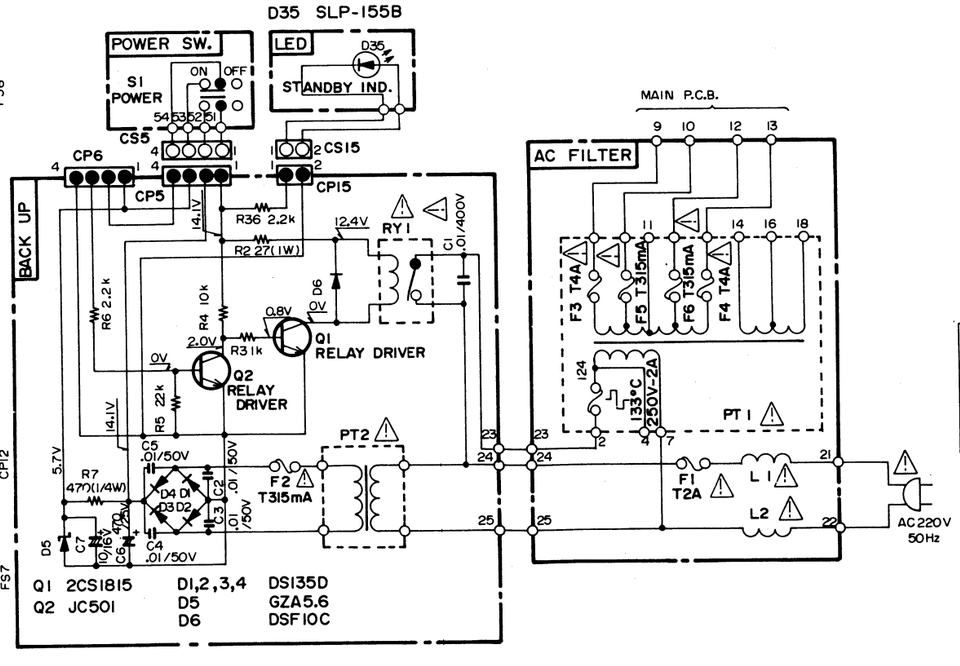
CA555 2/4

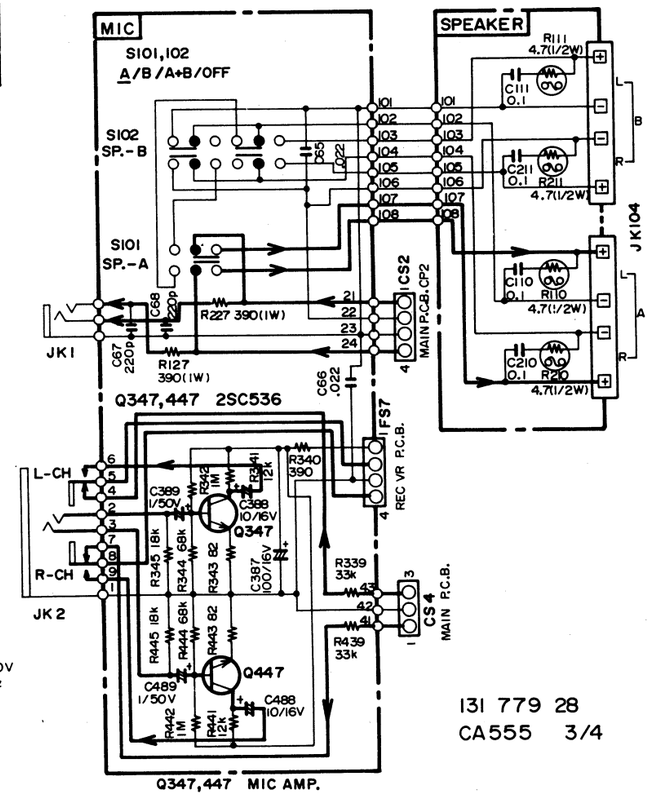




IC	PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
IC305	NORMAL SPEED	7.7	0.1	7.7	0	7.7	0.1	0	0	7.7	0.1	7.7	0.1	7.7	5.3
	HIGH SPEED	0	0	0	0	0	0	0	0	0	0	0	0	0	5.3







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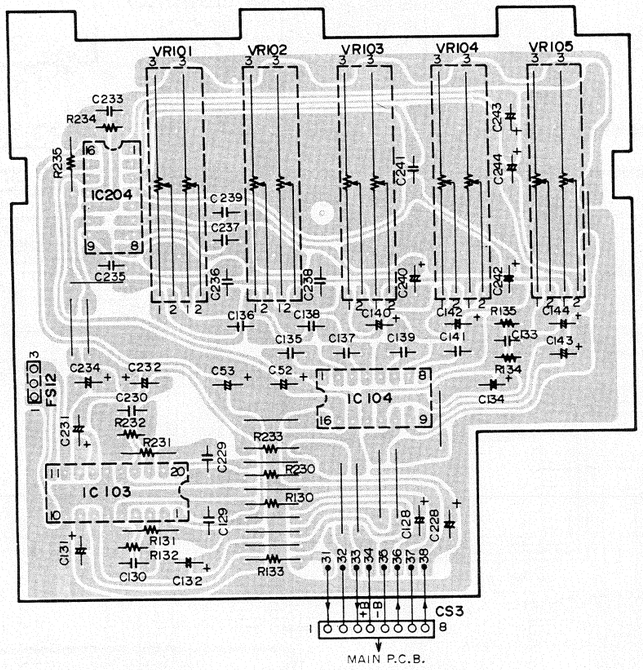
G. EQ. P.C.B. BOTTOM



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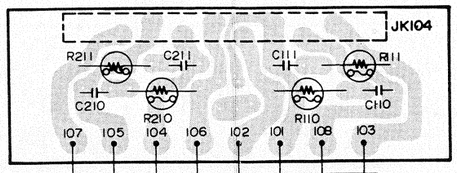

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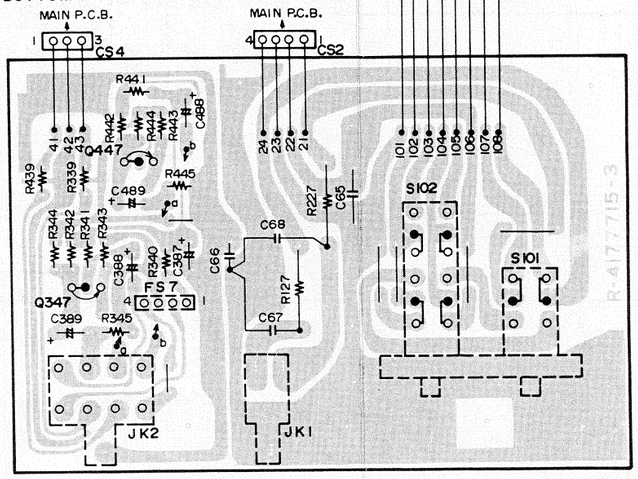

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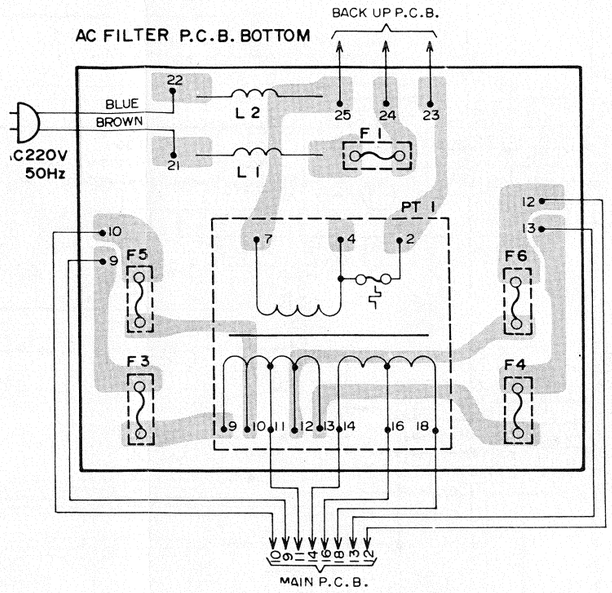
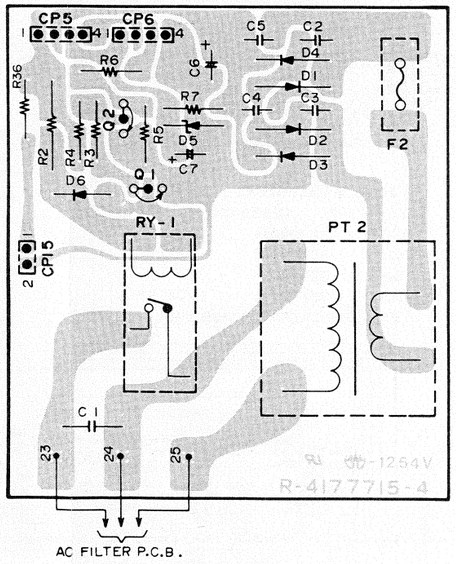
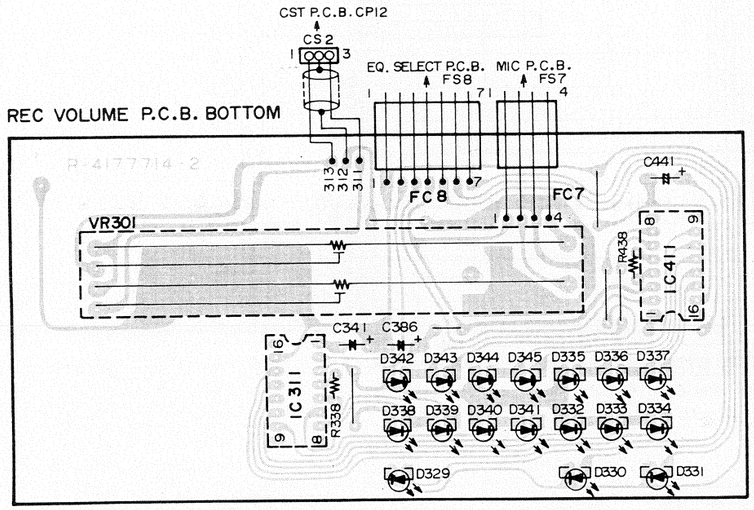
AC FILTER P.C.B. BOTTOM



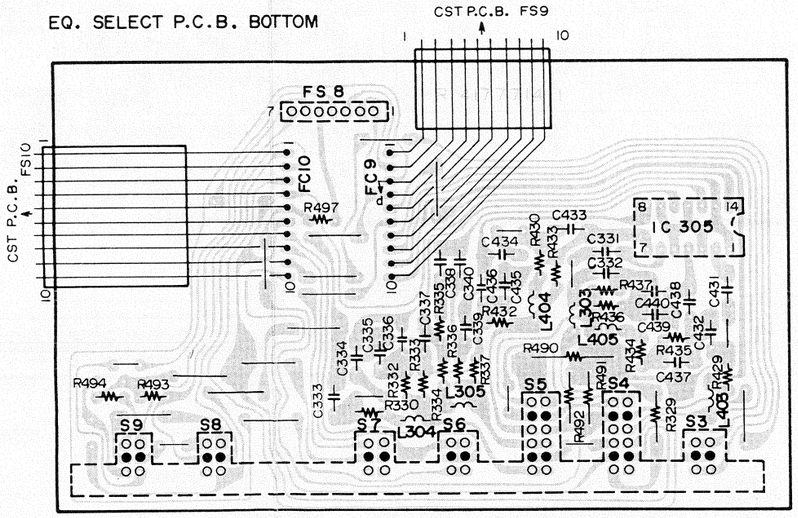
BACK UP P.C.B. BOTTOM



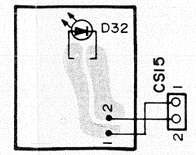
REC VOLUME P.C.B. BOTTOM



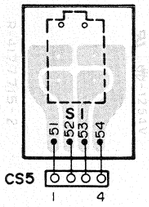
EQ. SELECT P.C.B. BOTTOM

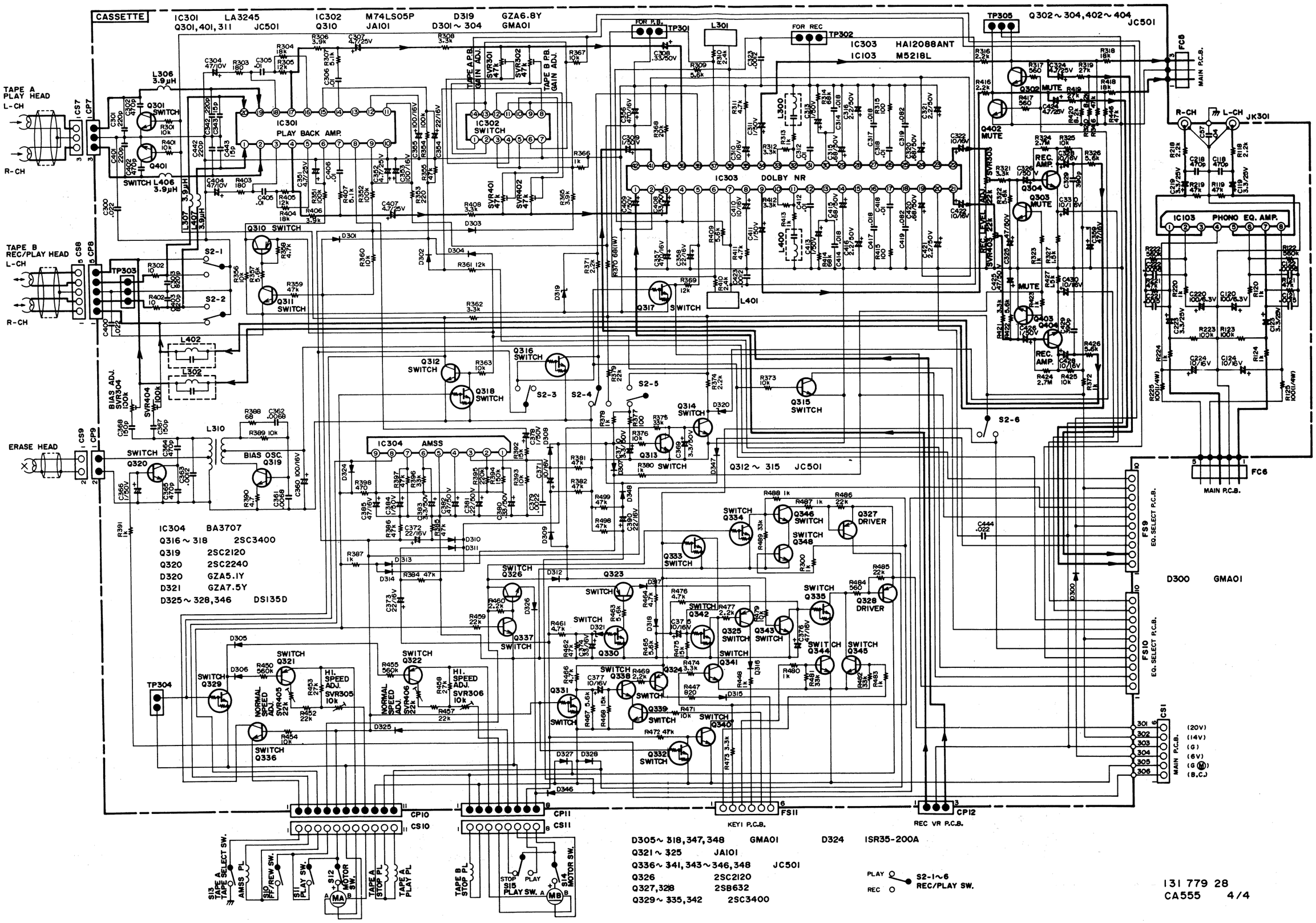


LED P.C.B. BOTTOM

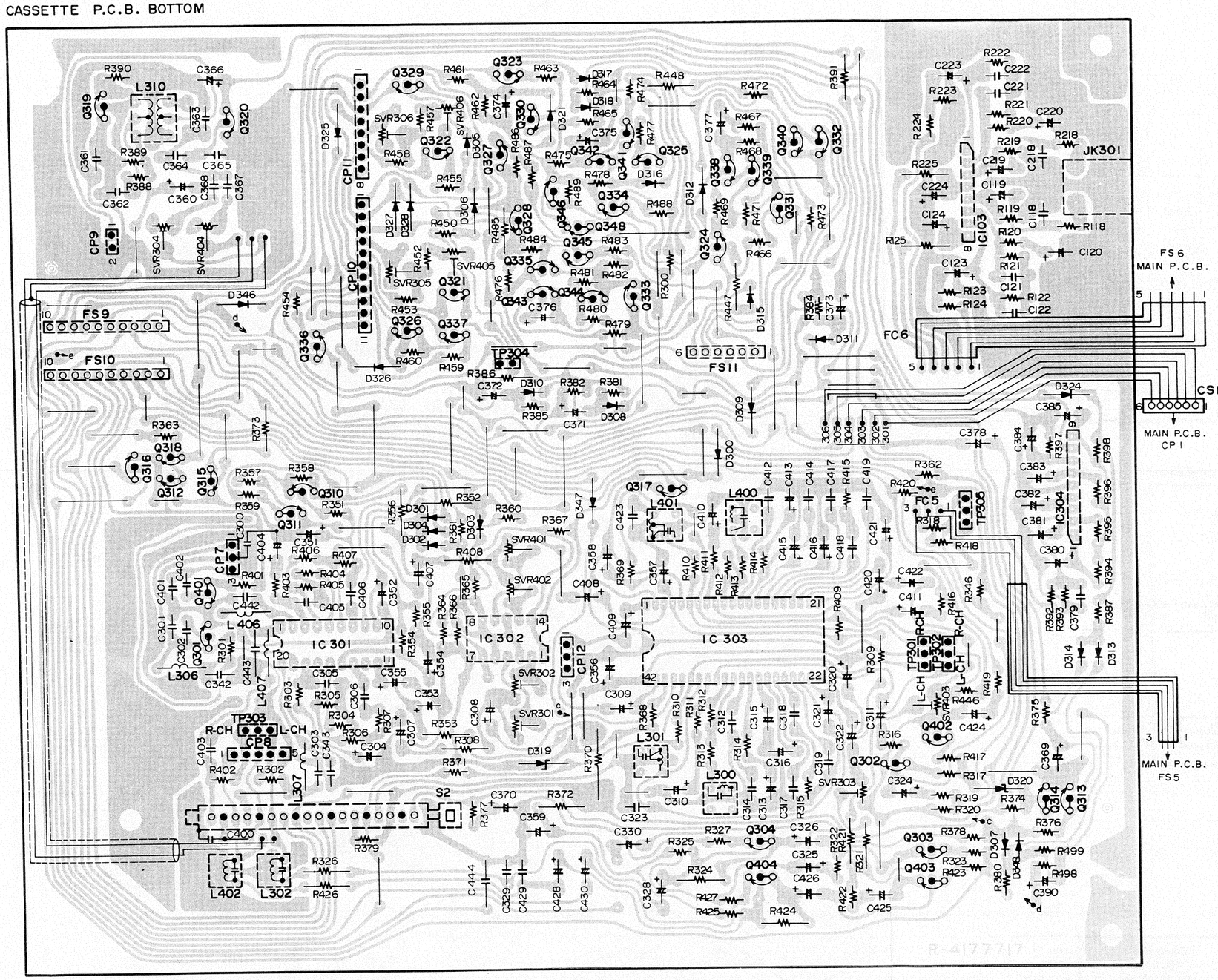


POWER SWITCH P.C.B. BOTTOM




CASSETTE
IC301 LA3245
Q301, 401, 311 JC501
IC302 M74LS05P
Q310 JA101
D319 GZA6.8Y
D301 ~ 304 GMA01
TAPE A PLAY HEAD
L-CH
R-CH
TAPE B REC/PLAY HEAD
L-CH
R-CH
ERASE HEAD
IC301 PLAY BACK AMP.
IC302 SWITCH
TAPE A P.B. GAIN ADJ.
TAPE B P.B. GAIN ADJ.
IC303 DOLBY NR
IC303 HA12088ANT
IC103 M5218L
FOR P.B.
FOR REC
TP301
TP302
TP303
TP304
TP305
Q301 SWITCH
Q401 SWITCH
Q310 SWITCH
Q311 SWITCH
Q312 SWITCH
Q313 SWITCH
Q314 SWITCH
Q315 SWITCH
Q316 SWITCH
Q317 SWITCH
Q318 SWITCH
Q320 SWITCH
Q319 BIAS OSC.
Q321 SWITCH
Q322 SWITCH
Q329 SWITCH
Q336 SWITCH
Q330 SWITCH
Q331 SWITCH
Q332 SWITCH
Q333 SWITCH
Q334 SWITCH
Q335 SWITCH
Q337 SWITCH
Q338 SWITCH
Q339 SWITCH
Q340 SWITCH
Q341 SWITCH
Q342 SWITCH
Q343 SWITCH
Q344 SWITCH
Q345 SWITCH
Q346 SWITCH
Q347 SWITCH
Q348 SWITCH
Q323 SWITCH
Q324 SWITCH
Q325 SWITCH
Q326 SWITCH
Q327 DRIVER
Q328 DRIVER
Q302 MUTE
Q303 MUTE
Q304 MUTE
Q402 MUTE
Q403 MUTE
Q404 MUTE
REC. AMP.
REC. AMP.
IC103 PHONO EQ. AMP.
IC304 AMSS
BIAS OSC.
L300
L301
L302
L306 3.9µH
L307 3.9µH
L310
L400
L401
L402
L406 3.9µH
L407 3.9µH
S2-1
S2-2
S2-3
S2-4
S2-5
S2-6
SVR301 47k
SVR302 47k
SVR303 22k
SVR304 100k
SVR305 10k
SVR306 10k
SVR401 47k
SVR402 47k
SVR404 100k
SVR405 22k
SVR406 22k
REC LEVEL ADJ.
NORMAL SPEED ADJ.
HI. SPEED ADJ.
JK301
JC501
FC6
MAIN P.C.B.
FS9
EQ. SELECT P.C.B.
FS10
EQ. SELECT P.C.B.
FS11
KEY1 P.C.B.
CP10
CS10
CP11
CS11
CP12
REC VR P.C.B.
CS1
Q302 ~ 304, 402 ~ 404
IC304 BA3707
Q316 ~ 318 2SC3400
Q319 2SC2120
Q320 2SC2240
D320 GZA5.1Y
D321 GZA7.5Y
D325 ~ 328, 346 DSI35D
Q312 ~ 315 JC501
D300 GMA01
D305 ~ 318, 347, 348 GMA01
Q321 ~ 325 JA101
Q336 ~ 341, 343 ~ 346, 348 JC501
Q326 2SC2120
Q327, 328 2SB632
Q329 ~ 335, 342 2SC3400
D324 ISR35-200A
S13 TAPE A TAPE SELECT SW.
AMSS PL
S10 FF/REW SW.
S11 PLAY SW.
S12 MOTOR SW.
TAPE A STOP PL
TAPE A PLAY PL
TAPE B STOP PL
S15 PLAY SW. A
S14 MOTOR SW.
STOP
PLAY
PLAY
REC
S2-1~6 REC/PLAY SW.
(20V)
(14V)
(G)
(6V)
(G)
(B.C.)
131 779 28
CA555 4/4

CASSETTE P.C.B. BOTTOM



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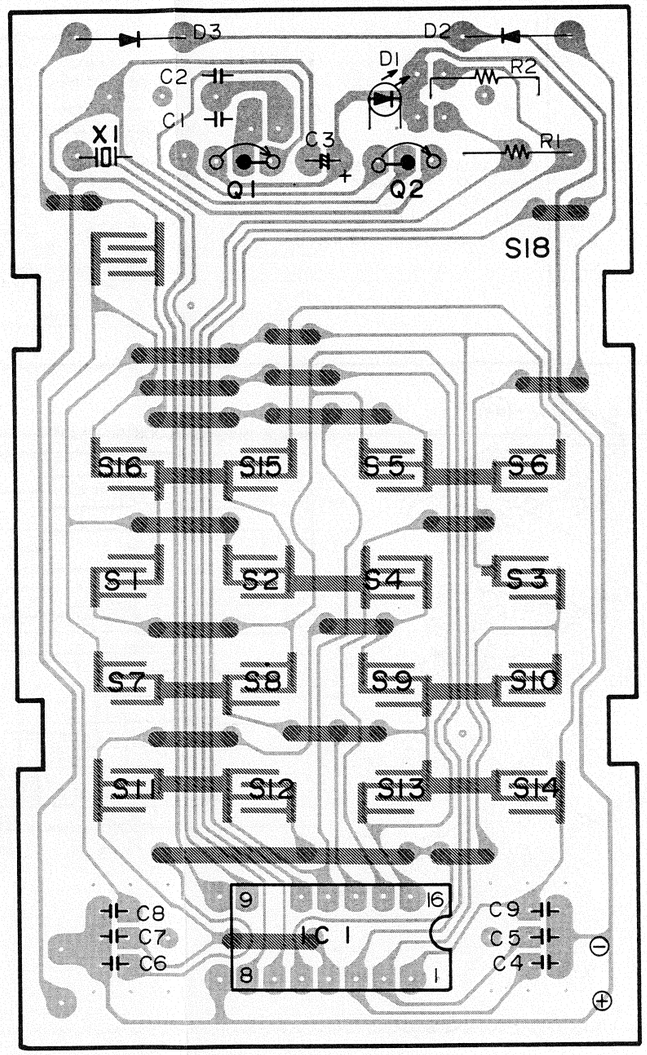
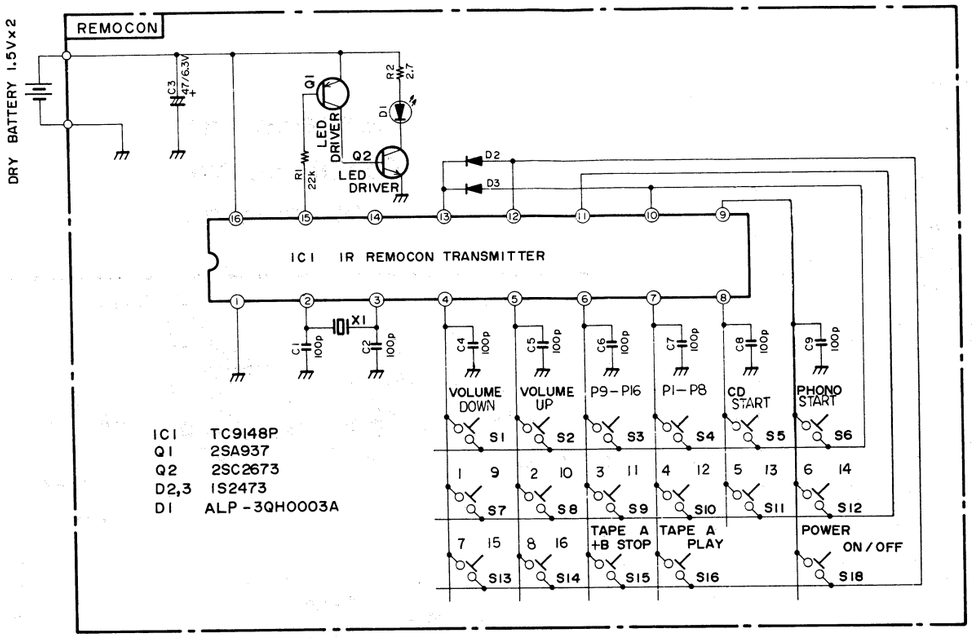
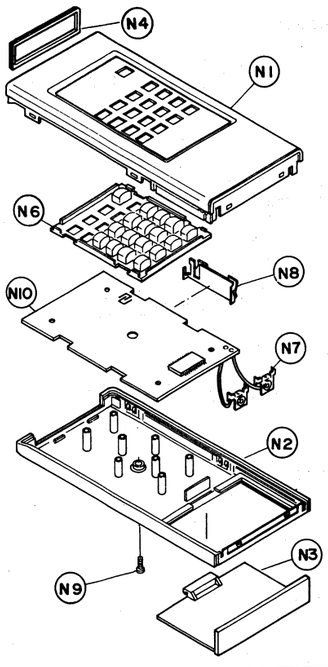
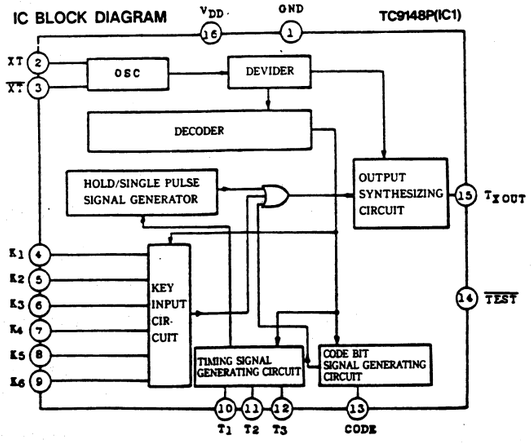
Fernbedienung
Remote control
Télécommande



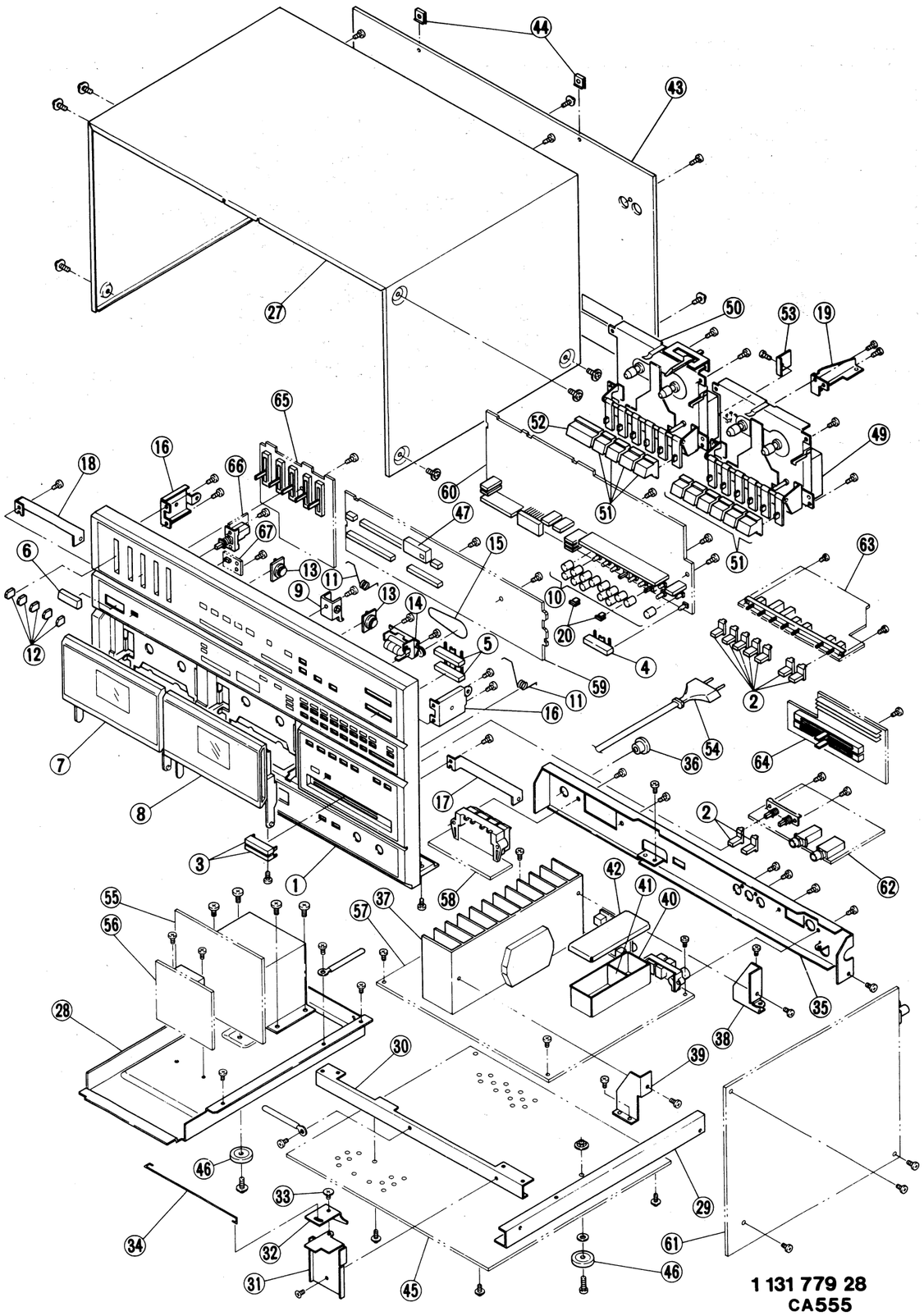






Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm
N 1	6138 16 29
N 2	6138 16 30
N 3	6138 16 31
N 4	6466 06 68
N 6	4188 04 66
N 7	7348 12 36
N 8	7348 12 35
N 9	7858 01 69

Positions-Nr Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.
IC 1	TC 9148 P	3771 53 37
Q 1	2 SA 937 R	3614 48 92
Q 2	2 SC 2673 Q	3614 36 48
D 1	LED	3681 17 07
D 2,3	1 S 2473	3656 08 56
X 1	Ceramic Filter	4552 71 19
C 3	4,7 uF 6,3 V min	3422 85 59
	+ Contact	7348 12 36
	- Contact	7348 12 35



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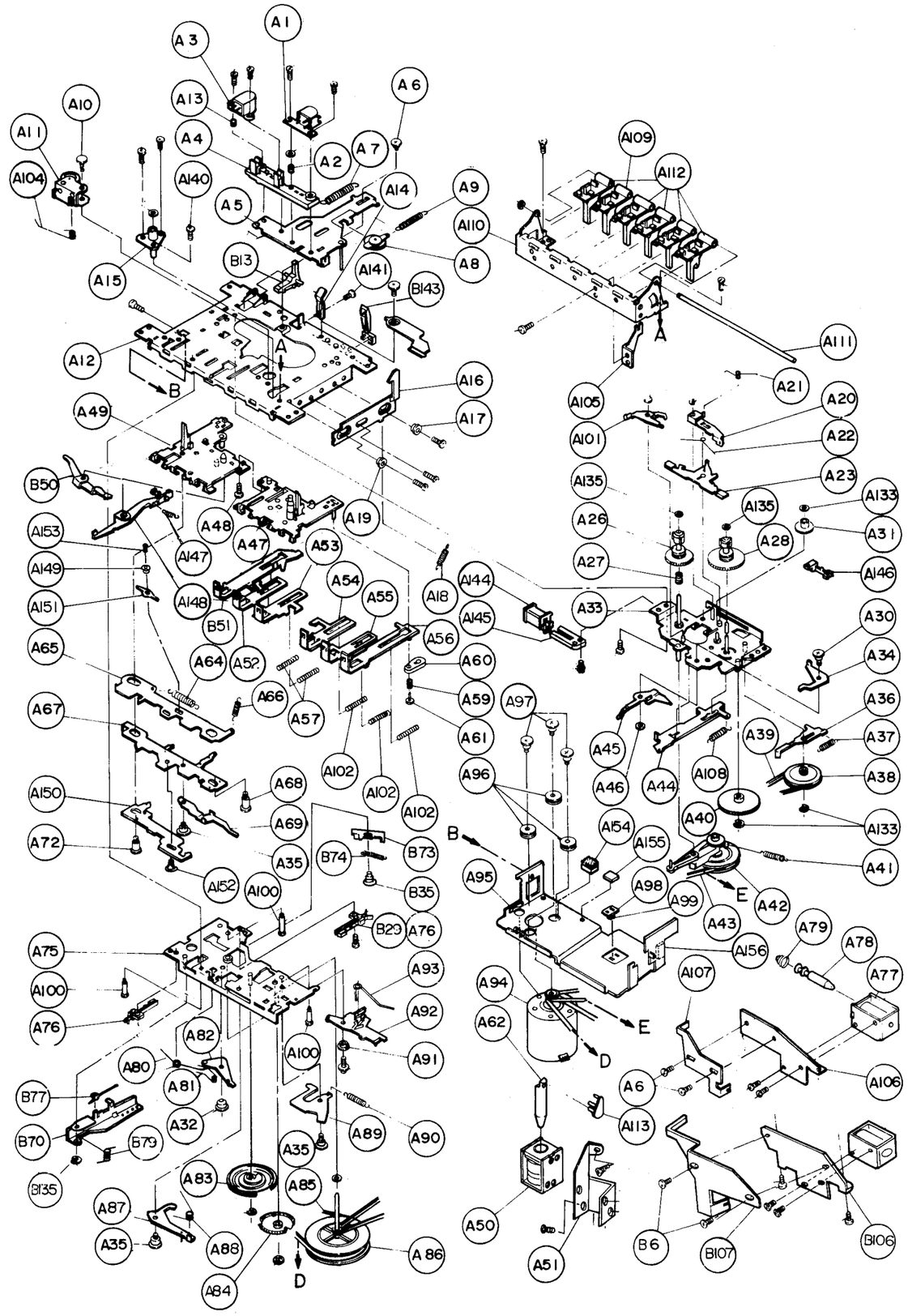
CA555

Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm.
Gehäuse und Zubehör Case and accessories Boîtier et accessoires	
CA 555: 5554 24 10 (CA 655: 5558 98 96)	
1	6134 48 29
	(6418 36 24)
2	6328 08 40
3	6328 08 41
4	6328 08 42
5	6328 08 43
6	6318 41 28
7	6136 10 86
	(6136 11 10)
8	6136 10 87
	(6136 11 20)
10	6568 11 71
11	7358 22 94
12	6328 08 44
13	7522 02 14
14	6467 16 85
15	7618 42 46
20	6318 41 68
27	6123 09 26
	(6123 09 36)
34	8318 50 91
36	8681 09 85
46	6273 40 15
43	6123 09 27
	(6123 09 37)
45	6123 09 23
49	5863 11 60
50	5863 11 61
51	6318 41 26
52	6318 41 27
53	8318 50 99
54	4147 80 14
55	6913 52 34
56	6913 53 35
57	6913 52 36
58	6913 52 37
59	6913 52 38
60	6913 52 39
61	6913 52 40
62	6913 52 41
63	6913 52 42
64	6913 23 76
65	6913 52 43
66	6913 52 44
67	6913 52 45

Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm.
Cassette A: 5863 11 61 (Cassette B: 5863 11 60)	
1	4335 92 70
	(4335 92 69)
2	7358 26 73
3	4337 91 49
4	8681 37 54
5	8318 46 59
6	7858 01 45
7	7358 24 88
8	7548 42 08
	(7548 41 84)
9	7358 24 87
10	8681 23 80
11	7538 33 41
	(7538 33 42)
12	8318 47 64
13	7358 33 60
	(8681 23 78)
14	7358 24 86
15	7618 42 18
16	8681 37 58
17	6568 11 54
18	7358 28 57
19	6568 11 53
20	8318 46 76
21	7358 23 05
22	7358 24 90
23	8318 46 81
26	6253 41 42
27	7358 22 98
	(7358 24 89)
28	6253 41 76
29	4188 04 08
30	7858 01 46
31	7525 09 73
32	6568 11 63
33	8318 46 80
34	8318 46 75
35	7578 05 47
36	8318 46 84
37	7358 23 03
38	7548 41 85
39	7618 42 19
40	7525 10 33
41	7358 23 04
42	7424 01 20

Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm
43	7618 42 28
44	8318 46 85
45	8318 46 86
46	7578 05 49
47	8681 37 57
48	7858 01 53
49	8681 37 56
50	4671 90 16
	(8318 46 61)
51	8318 50 92
	(8318 46 69)
52	8318 46 70
53	8318 46 71
54	8318 46 72
55	8318 46 73
56	8318 46 74
57	7358 24 98
59	7358 24 99
60	8681 37 62
61	8641 23 22
62	4671 90 17
63	4671 90 18
	(4671 90 12)
64	7358 24 96
65	8318 47 66
	(8318 46 79)
66	7358 24 97
67	8318 46 78
68	7858 01 49
69	8318 46 68
70	8318 46 77
72	7858 01 48
73	8318 46 64
74	7358 24 82
75	8318 46 63
76	4188 04 34
77	7358 24 92
78	4671 90 13
79	7358 23 57
	(7358 23 02)
80	7358 24 93
81	7358 24 94
82	8318 46 82
83	7525 10 32
84	7525 10 31

Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm
85	7618 42 27
86	7518 40 93
87	8318 46 83
88	7358 24 83
89	8318 46 66
90	7358 33 71
91	6568 11 55
92	8318 47 68
	(8318 46 65)
93	7358 24 84
94	4432 92 14
95	8318 48 05
96	6552 23 41
97	7858 01 50
98	8681 37 60
99	7358 24 95
100	7858 01 47
101	8318 46 62
102	7358 26 80
103	7358 33 60
104	7358 24 81
105	8318 46 87
106	8318 48 06
107	8318 48 07
108	8681 37 59
109	8318 50 93
110	8318 46 60
111	7578 05 48
112	8318 48 04
113	(8318 50 94)
132	7726 05 33
133	8188 03 98
135	(7726 05 33)
143	(4188 04 67)
144	(4671 90 11)
145	(4653 41 04)
146	(4188 04 68)
147	(7358 23 45)
148	(8318 50 95)
149	(8318 50 96)
150	(8318 50 97)
151	(8318 50 98)
152	(7858 01 70)
153	(7858 01 71)



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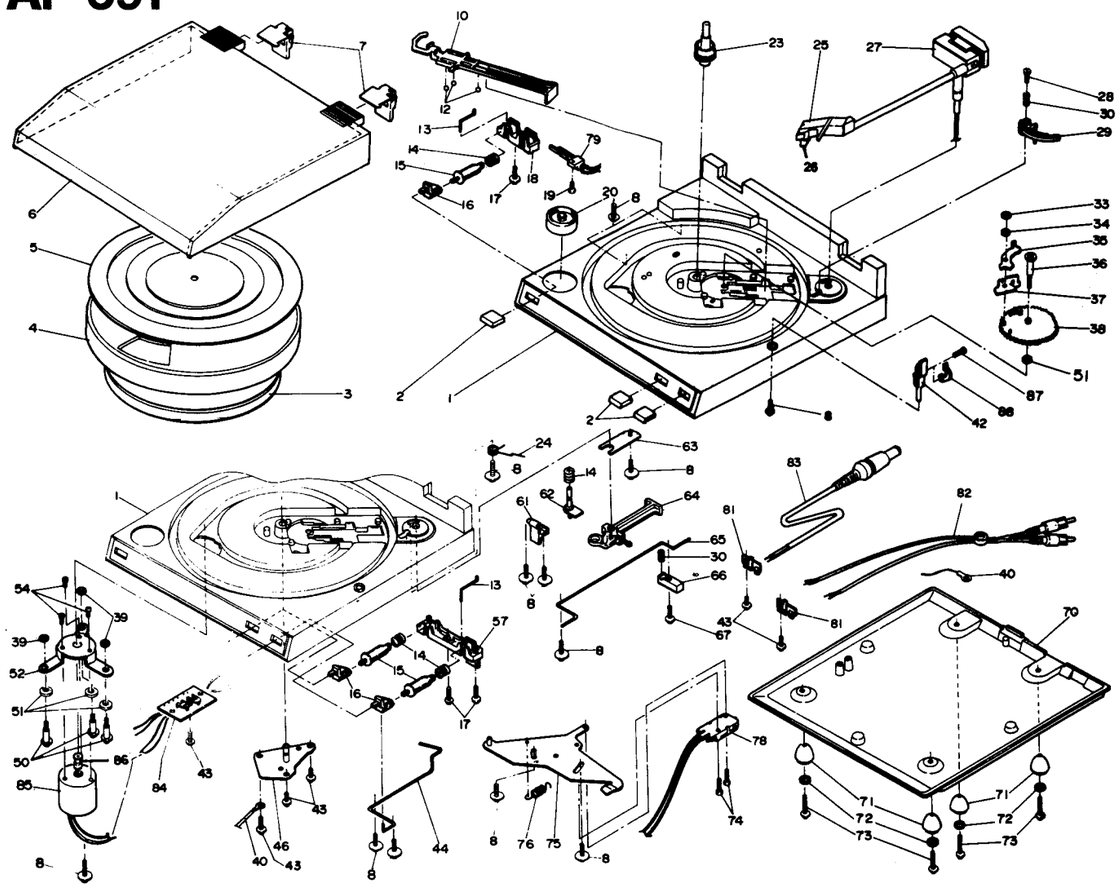


Positions-Nr. Reference-No. Numéro de position	Bestell-Nr. Part-No. Numéro de commande	Positions-Nr. Reference-No. Numéro de position	Bestell-Nr. Part-No. Numéro de commande	Positions-Nr. Reference-No. Numéro de position	Bestell-Nr. Part-No. Numéro de commande
1	6134 48 68	24	6257 43 46	61	6257 43 68
2	6318 42 15	25	6257 43 47	62	6257 43 61
3	6257 43 36	26	6257 43 48	64	6257 43 62
4	6257 43 37	27	6257 43 49	65	6257 43 63
5	6257 43 38	29	6257 43 50	66	6257 43 64
6	6114 07 29	30	6257 43 51	70	6134 48 69
7	6352 10 19	35	6257 43 52	71	6257 43 65
10	6257 43 39	36	6257 43 53	76	6257 43 69
12	6257 01 25	37	6257 43 54	78	4188 04 86
13	6257 43 40	38	6257 43 55	79	4188 04 87
14	6257 43 41	42	6257 43 56	82	4131 41 53
15	6257 43 42	44	6257 43 57	83	4131 41 43
16	6257 43 43	50	6257 43 58	84	6913 22 77
18	6257 43 44	51	6257 43 59	85	6257 43 66
20	6257 42 01	57	6257 43 60	86	6257 43 67
23	6257 43 45			88	6257 43 70

JUSTIERUNG - ALIGNMENT PROCEDURES - OPERATIONS D'AJUSTAGE

JUSTIERUNG DES TONARM-ABHEBEPUNKTES

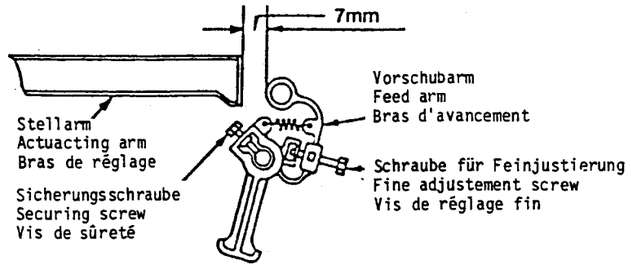
A) Bei kleinem Fehler
a) Abhebepunkt weiter nach innen:
Feinjustierungsschraube im Uhrzeigersinn drehen.
b) Abhebepunkt weiter nach außen:
Feinjustierungsschraube entgegen dem Uhrzeigersinn drehen.
B) Bei großem Fehler
a) Feinjustierungsschraube in die mittlere Position drehen.
b) Sicherungsschraube lösen, einen Abstand zwischen dem Stellarm und dem Vorschubarm von ungefähr 7 mm einstellen, und die Schraube festziehen.
c) Entsprechend Schritt A) vorgehen und die Schraube für die Feinjustierung einstellen.
d) Sicherungsschraube fest anziehen.

LIFT-OFF POINT ADJUSTMENT OF TONE-ARM

A) When error is slight.
a) To retard the lift-off point, turn the fine adjustment screw clockwise.
b) To advance the lift-off point, turn the fine adjustment screw counterclockwise.
B) When error is large.
a) Set the fine adjustment screw at the middle position.
b) Loosen securing screw, adjust a gap between the actuating arm and the feed arm to about 7 mm and tighten the screw.
c) Go to the above step A) and the fine adjustment screw.
d) Tighten the securing screw firmly.

REGLAGE DU POSITION DE LEVAGE

A) En cas de faible erreur
a) Pour lever l'arm plus tard:
tournez la vis de réglage fin dans le sens des aiguilles d'une montre.
b) Pour lever l'arm plus tôt:
tournez la vis de réglage fin dans le sens contraire des aiguilles d'une montre.
B) En cas d'erreur élevée
a) Tournez la vis de réglage fin dans sa position médiane.
b) Desserrez la vis de sûreté, réglez l'écart entre le bras de réglage et le bras d'avancement sur 7 mm env. et reserrez provisoirement la vis.
c) Procédez suivant l'étape A) et actionnez la vis de réglage fin.
d) Reserrez à fond la vis de sûreté.



MOTORAUSTAUSCH UND -JUSTIERUNG

A) Bodenabdeckung abnehmen.
B) Anschlüsse des Motors lösen.
C) Sicherungsschrauben des Motors auf der Unterseite des Plattenspielers lösen.
D) Lösen Sie die Sicherungsschrauben für den Plattenteller, um den Plattenteller vom Motor abnehmen zu können. Gehen Sie in umgekehrter Reihenfolge vor, um den Motor einzubauen.

MOTOR REPLACEMENT AND ADJUSTMENT

A) Remove the bottom cover.
B) Remove connections of the motor.
C) Loosen the motor securing screws at the bottom side of the record player.
D) Loosen the plate securing screws to detach the plate from the motor.
Reverse the order of the procedures for installing the motor.

REMPLACEMENT ET AJUSTAGE DU MOTEUR

A) Enlever la partie de fond.
B) Enlevez les connexions du moteur.
C) Desserrez les vis de sûreté du moteur situées sur le fonde de la platine tourne-disques.
D) Desserrez les vis de sûreté du plateau tourne-disques afin de pouvoir retirer ce dernier du moteur. Procédez dans le sens inverse des opérations pour monter le moteur.

TONARMAUSTAUSCH UND -JUSTIERUNG

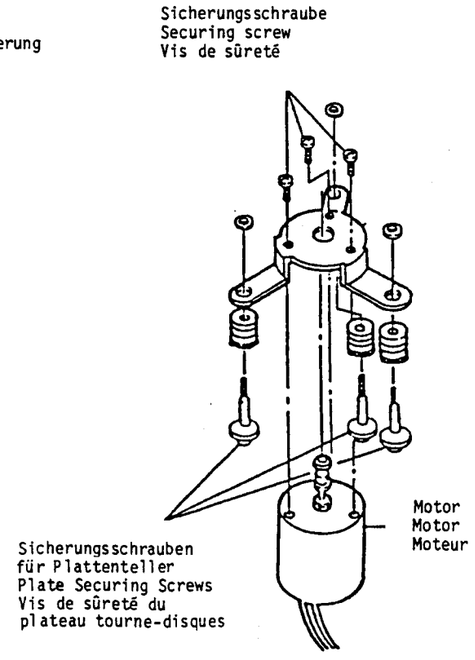
A) Bodenabdeckung abnehmen.
B) Anschlüsse (rot, grün, schwarz, blau und weiß), an der 3P-Anschlußleiste lösen.
C) Sicherungsschraube des Vorschubarms lösen, um ihn vom Tonarmschaft abnehmen zu können.
D) Durchtrennen Sie den CS-Ring, der den Tonarm sichert, mit der Kneifzange von der Unterseite des Plattenspielers aus. Gehen Sie in umgekehrter Reihenfolge vor, um den Tonarm einzubauen.
*Nachdem der Tonarm ausgetauscht ist, RÜCKFÜHRUNGSJUSTIERUNG ausführen, die in den JUSTIERUNGSVERFAHREN beschrieben wird.

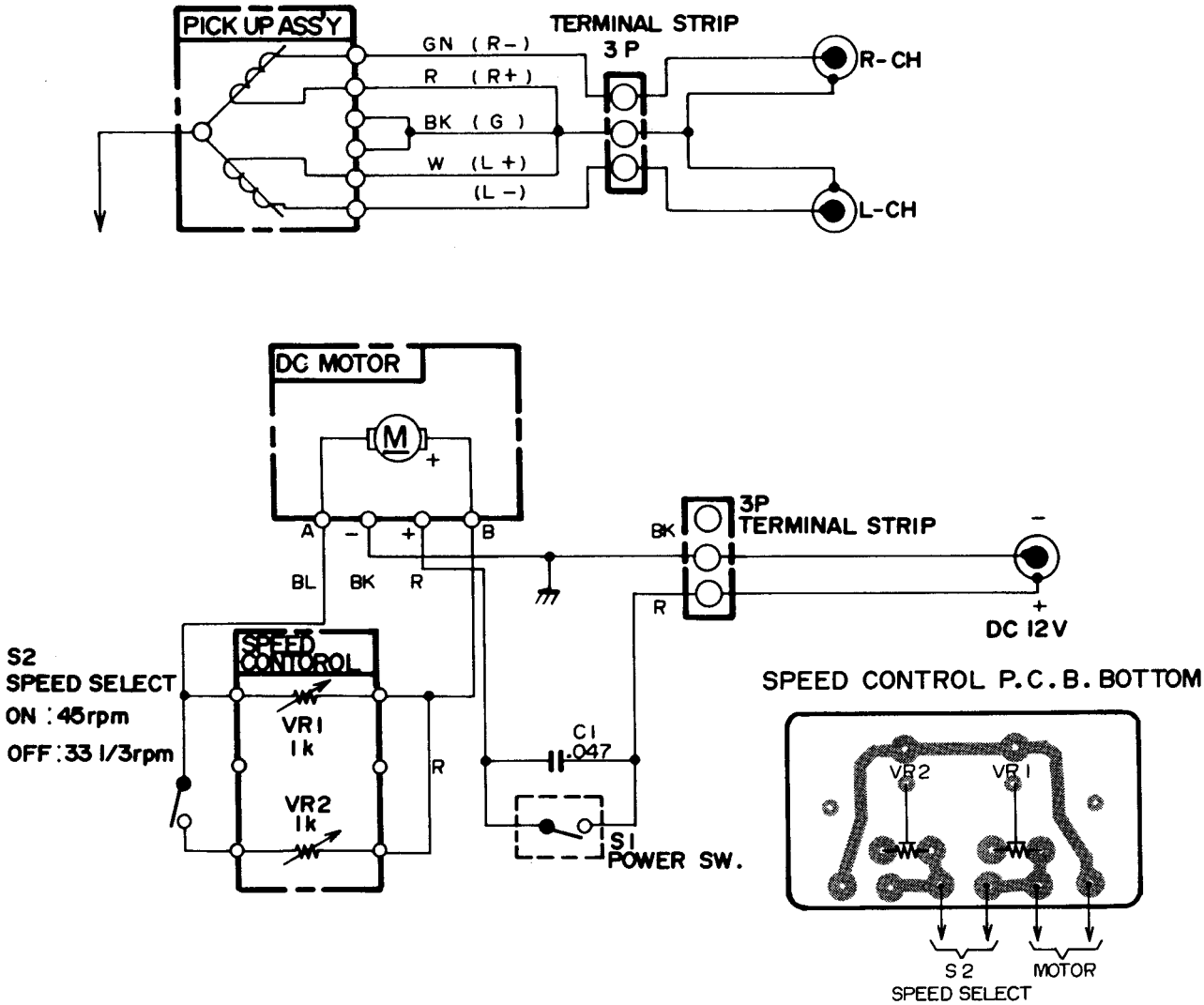
TONEARM REPLACEMENT AND ADJUSTMENT

A) Remove the bottom cover.
B) Remove lead wires (red, green, black, blue and white) connected to 3P terminal strip.
C) Loosen securing screw of the feed arm to remove it from the tone arm shaft.
D) Cut the CS-ring retaining the tone arm with the nipper from the bottom side of the record player.
Reverse the order of the above procedure to install the tone arm.
*After replacing the tonearm, make the RETURN ADJUSTMENT described in ADJUSTMENT PROCEDURES.

REMPLACEMENT ET AJUSTAGE DU BRAS DE LECTURE

A) Retirer la partie de fond.
B) Enlevez les connexions (rouge, vert, noir, bleu et blanc) reliés à la réglette de connexion 3P.
C) Desserrez la vis de sûreté du bras d'avancement afin de pouvoir l'enlever du bras de lecture.
D) Coupez la bague CS de retenue du bras de lecture à l'aids de tornilles à partie. De la face inférieure du tourne disques. Procédez dans le sens inverse des opérations pour monter le bras de lecture.
* Après avoir remplacé le bras de lecture, procédez à l'ajustage du retour décrit dans le paragraphe OPERATIONS D'AJUSTAGE.





DP 591

Für dieses Gerät gilt das Service-Manual P 113 (6611 81 48) mit folgenden Änderungen in der Ersatzteile-Liste:

For this set, Service Manual P 113 (6611 81 48) applies, except for the following changes in the Spart Parts List:

Le manuel de service convenant à cet appareil est le P 113 (6611 81 48) comprenant les modifications suivantes de la liste de pièces de rechange:

Gehäuse und Zubehör
Cabinet and accessories
Boîtier et accessoires

Laufwerk
Drive mechanism
Méchanisme d'entrainement

Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm
1	6273 48 57
8	8318 40 09
9	6318 41 25
11	6466 06 78
12	6134 48 70
16	6134 40 14
32	6913 25 56
37	7858 01 59

Positions-Nr Reference-No. Numéro de pos.	Bestell-Nr. Part-No. No. de comm
19	8318 34 63
24	8681 34 62
25	8318 34 64
30	8318 51 20
31	8318 51 21
33	8681 34 65
34	8318 52 42
44	8318 51 17

C 286, 287 47 uF 16 V miniatur 3422 85 42

Positions-Nr. Reference-No. Numéro de pos.	Gegenstand Description Description	Bestell-Nr. Part-No. No. de comm.
S 1	POWER	4112 96 42
S 2	Record/Playback	4112 96 29
S 101, 102	SPEAKER A-B	4112 96 30
S 601...608	VOLUME, BALANCE LOUDNESS, PHONO, CD, TV/VCR	4112 95 26
S 611...626	FM,MW,LW,TUNING,MEMORY, P1/9...P8/16,P1-8,P9-16	4115 86 41
S 627, 628	MONO/STEREO,AUTO/MANUELL	4112 96 41
JK 1	PHONES	4144 81 41
JK 2	MICROPHONE	4144 82 02
JK 101, 102	AUTO FUNCTION	4144 81 51
JK 103	AUX, VCR	4144 81 63
JK 104	SPEAKERS	4144 82 01
JK 301	PHONO	4144 81 96
JK 501	ANTENNA	4144 81 87
PT 1	Power-Transformator	4511 33 75
PT 2	Stand-By-Transformator	4511 33 76
RY 1	Relais	4124 10 34

Ersatzteil-Bestellungen

Ø 07231/ 13338
Ø 07231/35 66 65

BTX-Ersatzteil-Bestellseite

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